Vaccination

Pandemic Influenza sub plan

2015
Contents Page

Introduction ............................................................................................................................................... 4
Background .............................................................................................................................................. 4
Strategy .................................................................................................................................................. 5
Priority groups ..................................................................................................................................... 5
Vaccine .................................................................................................................................................. 6
Vaccine distribution, storage and consumables .................................................................................... 6
Staffing .................................................................................................................................................. 7
Immunisation providers .......................................................................................................................... 7
Support staff ......................................................................................................................................... 8
Volunteers .......................................................................................................................................... 8
Cost recovery ....................................................................................................................................... 8
Communication ..................................................................................................................................... 8
Settings for pandemic vaccination delivery .......................................................................................... 9
Schools .................................................................................................................................................. 9
Residential Care Facilities .................................................................................................................... 9
Prison Health Services .......................................................................................................................... 9
General practice ................................................................................................................................... 9
Pharmacy ........................................................................................................................................... 10
Private worksite vaccination programs .................................................................................................. 10
Government worksite vaccination programs ........................................................................................ 10
Local Council Community Vaccination Programs ................................................................................ 10
Additional Health Care Settings ........................................................................................................... 11
Mass vaccination clinics ..................................................................................................................... 11
Standard one: effective and timely communication ............................................................................ 11
Standard two: appropriate and timely training of staff ........................................................................ 11
  Vaccine providers ............................................................................................................................... 11
  Support staff ..................................................................................................................................... 11
  Volunteers ........................................................................................................................................ 12
Standard three: appropriate site selection and set up .......................................................................... 12
Standard four: assessment of expected demand and allocation of appropriate resources ................. 13
  Table 1: Suggested staffing numbers for clinics of various sizes ..................................................... 13
Standard five: an efficient and streamlined clinic flow ........................................................................ 14
  Table 2: Suggested stations in a mass vaccination clinic ................................................................. 14
Introduction

The most effective way of preventing individual infection with an influenza virus is vaccination. The early provision of a customised pandemic vaccine will be one of the goals of a pandemic response plan.

The South Australia Pandemic Influenza Vaccination Sub-plan (this Sub-plan) is a sub-plan of the SA Health Pandemic Influenza Plan. The aim of this Sub-plan is to seamlessly deliver appropriate vaccination in the event of an influenza pandemic and thereby assist with achieving the overall aims of the SA Health pandemic influenza plan which are to minimise the health consequences of an influenza pandemic on the South Australian community and minimise disruption to the South Australian health system.

Due to the unpredictable nature of the disease this Sub-plan is designed to be flexible to allow an appropriate response. It should complement the local, regional and organisational pandemic response plans developed across South Australia (SA).

Activation of any strategy will be dependent on the pattern of disease, and the recommendations from the Australian Government, and the South Australian Chief Public Health Officer.

This Sub-plan should be used in conjunction the SA Health Pandemic Influenza Plan and the most recent version of the following documents:

- Immunisation for Health Care Workers in South Australia 2015 Policy Directive (currently in consultation draft)

This Sub-plan is not a static document and will be updated as required to include the most current information available. Evaluation of response will occur after a pandemic.

Background

In the interpandemic period, strategy aims to develop robust infrastructure for the delivery of annual influenza vaccination to decrease the mortality and morbidity associated with seasonal influenza. This infrastructure will be the prime method of delivery of pandemic influenza vaccination, although mass vaccination clinics may also be required.

The three levels of government play an integral part in coordinating the various elements of a vaccination program.

The role of the Australian Government is to:

- Ensure the development and supply of a customised pandemic vaccine and the materials required for vaccine provision.
- Provide guidance on eligible groups for use of the candidate or customised pandemic vaccine.
- Conduct adverse event surveillance and reporting.

The role of the South Australian Government is to:

- Distribute vaccine and supplies when available.
Conduct adverse event surveillance and reporting.

Communicate relevant information to the community and immunisation providers.

The role of local government is to:

Coordinate and implement, or support the provision of, immunisation programs within their council area (see the *South Australian Public Health Act 2011*).

**Strategy**

Pandemic vaccination delivery will build on the current service delivery models for seasonal influenza. Existing vaccination services will be used where possible, to provide pandemic vaccination. The traditional concept of mass vaccination which focuses on drawing the population to centrally located immunisation clinics can be problematic in terms of service delivery capacity and management of large crowds.

Flexibility is essential in order for the plan to be appropriately responsive to unknown factors such as the pattern of disease, community and geographic diversity, and vaccine availability.

The ultimate aim is mass vaccination with a customised pandemic vaccine, although other methods may be required initially:

- ‘Ring vaccination’ (rapid identification and vaccination of contacts) may be appropriate in responding to a small localised outbreak.
- Prioritisation of individuals at greater risk, such as healthcare workers or individuals at high risk of severe outcomes may be initially required, if there are limited vaccine stocks.

Once sufficient time and vaccine stocks are available to vaccinate the wider population, mass vaccination will be advocated. Initial distribution strategies may target individuals more likely to spread infection and/or more likely to develop severe disease. Children have a higher attack rate of influenza and shed the virus for longer periods than adults, as such, children are considered to be significant vectors of influenza across the community.

**Priority groups**

Free seasonal influenza vaccine is available for the following groups.

- All pregnant women. Pregnant women are at increased risk of morbidity and mortality from influenza, with the risk increased particularly in the later stages of pregnancy. Influenza vaccination may also help protect the infant from influenza for the first 6 months.
- All Aboriginal and Torres Strait Islander children aged 6 months to less than 5 years of age, and all Aboriginal and Torres Strait Islander persons aged 15 years and older.
- All medical at risk persons aged 6 months and older. (For details see the Australian Immunisation Handbook)
- All persons aged 65 years and older. Influenza vaccine reduces hospitalisations from influenza and pneumonia, and all-cause mortality in adults ≥65 years of age.

In a pandemic, priority groups will be determined by the Australian Government and confirmed at the time the customised pandemic vaccine is available. It is anticipated high priority for receipt of pandemic vaccine will include:

- Health care workers (HCWs), in order to maintain capacity for treatment and prevention services

---

Workers in essential services, who may include: State Emergency Services (SES), South Australian Police (SAPOL), South Australian Country Fire Service (CFS) and South Australian Metropolitan Fire Services (MFS), water supply, and electricity services.

Vaccine

Seasonal influenza vaccination can either be trivalent or quadrivalent, with the recommended strains advised by the World Health Organization (WHO) and endorsed by the Australian Influenza Vaccine Committee prior to the influenza season. Full protection is usually achieved within 10–14 days of vaccination but there is evidence of increased immunity within a few days.

Candidate pandemic vaccines are vaccines against strains currently considered of pandemic potential such as avian-origin H5, H7 and H9 viruses, and swine-origin H3N2 variant viruses. The effectiveness of candidate pandemic vaccines will depend on the similarity between the strain used to develop the vaccine and the strain causing the pandemic. Administration of a candidate pandemic vaccine would only be recommended on specific advice from WHO and the Australian Government. Administration of a single dose of pre-pandemic vaccine to prime the immune response may allow for induction of immunity through a single dose of customised pandemic vaccine (as opposed to 2 doses of customised pandemic vaccine).

It may take several months before a customised pandemic vaccine is available. The Australian Government has arrangements in place to ensure that once a customised pandemic vaccine is developed it can be purchased as quickly as possible. Delivery strategies will need to be devised to make best use of the customised vaccine as it becomes available. Strategies may need to take account of existing levels of immunity. Individual compliance with vaccination is likely to depend on the perceived severity of the pandemic strain and the adverse effects associated with vaccination. The dose schedule of the customised pandemic vaccine may require 2 doses several weeks (likely 2-4 weeks) apart to achieve protective levels of immunity, although in the recent H1N1 pandemic only 1 dose was required in most groups.

Customised pandemic vaccine may be produced in multi-dose vials. The advantages of multi-dose vials include: faster manufacture, reduced packaging costs, reduced storage space and reduced wastage from overfilling. The disadvantages of multi-dose vials include: multi-dose vials are prone to bacterial and viral contamination; complaints about multi-dose vials in the 2009 H1N1 pandemic; and providers are less familiar with the use of multi-dose vials, as except in the pandemic situation, multi-dose vials are not usually used in Australia.

Vaccine distribution, storage and consumables

It is imperative to maintain the cold chain by transporting and storing vaccines within the safe temperature range (+2°C to +8°C). For more details see Strive for Five\(^3\).

The Immunisation Section of the Communicable Disease Control Branch, SA Health, is responsible for the distribution of funded childhood and specific adult vaccines to all immunisation service providers within SA. The current contractor distributes vaccines for the National Immunisation Program schedule to almost 1000 sites throughout SA over a 2 week period. The service is supported through agreed standard operating procedures and risk management strategies.

The Immunisation Section is responsible for distribution of pandemic influenza vaccine as it becomes available, according to Australian Government recommendations regarding priority groups. Currently there is no agreement in place that covers the distribution of pandemic vaccine in the South

Australian contract. It is expected that distribution of pandemic vaccine will be supported with terms and conditions within the existing service agreement with the current contractor.

It is anticipated that a stockpile of injection packs will be distributed with the pandemic influenza vaccine that contain materials required to administer the vaccine (if multi-dose vials are used).

Security of available vaccine will be important due to expected high public demand for the pandemic influenza vaccine. The security of the vaccine during distribution is covered in the service agreement with the contractor. Once distributed, individual providers should ensure it is held in appropriate secure storage.

Staffing

Immunisation providers

Various classes of health practitioners may be immunisation providers, including medical practitioners, nurses, pharmacists and paramedics.

Registered and enrolled nurses can administer vaccinations under a medical order (including a standing drug order) and within their scope of practice.

As per the Controlled Substances (Poisons) Regulations 2011 (the Regulations), without a medical order, registered nurses and pharmacists who have, within the previous 3 years, completed a vaccination course approved by the Minister, may administer vaccinations within an incorporated hospital program, South Australian Ambulance Service program, council or council subsidiary program, or an immunisation program delivered by an organisation approved by the Minister. Registered nurses may administer vaccines on the National Immunisation Schedule or as documented in the Australian Immunisation Handbook. Pharmacists may only administer influenza vaccine to persons ≥16 years of age.

The Vaccine Administration Code under the Regulations could be altered, such as in a pandemic, to include the administration of pandemic influenza vaccination by additional classes of health professionals such as Aboriginal Health Practitioners, following a specific pandemic training program.

In a pandemic, other potential immunisation providers, after appropriate training, might include community nurses, Aboriginal health services, hospital nurses, practice nurses, infection control nurses, and occupational health and safety nurses in industry and essential services.

Vaccination recommendations are continually changing, therefore regular continuing professional development is recommended to ensure immunisation providers remain adequately trained to vaccinate. The Immunisation Section runs face-to-face annual seasonal influenza vaccination updates primarily aimed at hospital-based nurse immunisation providers, but also open to others. Similar session(s) could be run in the event of a pandemic. Online education courses are available and could be adapted.

Immunisation providers must be knowledgeable about vaccines; effective cold chain including vaccine transport, storage and handling; pre-vaccination screening and consent; equipment required and vaccination administration technique; and post-vaccination care including management of adverse reactions. Pandemic specific education may include management of multi-dose vials, infection control principles in the large clinic setting, information about pandemic influenza, and information specific to the pandemic vaccine and eligible groups.

---

Support staff

Provision of vaccination services requires coordination by support staff. All organisations should delegate staff to coordinate vaccination programs, within the organisation and/or for patient services. Mass vaccination clinics require support from administration staff, therefore it is appropriate to examine surge capacity and any staff training requirements during the interpandemic period.

Volunteers

Volunteers may be valuable in several roles within the large clinic setting. Volunteer management policies developed by an organisation in the context of pandemic planning should consider the following issues: registration of volunteers, risk management/insurance, worker health and safety, duty of care, patient confidentiality, provision of clear job descriptions for all volunteer positions, provision to volunteers of a clear explanation of their rights and responsibilities, and equal opportunity policies.

Cost recovery

Although the vaccine and consumables will be provided free for use with eligible groups, it is unknown whether there will be a system to reimburse specifically for pandemic vaccination services. A user-pays system may be utilised by provider types not reimbursed by through the Medicare Benefits Scheme.

Communication

Clear communication to HCWs and the community throughout the pandemic response is critical to to seamlessly deliver appropriate vaccination and ensure good uptake of the customised vaccine. The public’s perceived risk-benefit profile for vaccination is likely to be dynamic, becoming less favourable over the course of a pandemic response.

Information should be timely and consistent. The Immunisation Section will work closely with the Communications and Media Branch of SA Health. SA Health will prepare information resources such as fact sheets on the disease and vaccination for the public and health care providers, which can be distributed to the public, placed online, and made available at clinics. As immunisation providers are located in many settings it will be important to take advantage of a variety of communication avenues to communicate with providers, including the SA Health website www.sahealth.sa.gov.au and fax via flexi messaging system (currently being used for Public Health Alerts). Local government may be able to facilitate communication to other providers such as those in remote locations, and industry settings. Communications will include:

> information regarding the roll out of the vaccination program including protocol changes (and the rationale behind any changes)
> detail on the eligible groups for vaccination
> messages to encourage successful uptake/coverage
> messages to maintain an orderly response and avoid panic
> messages regarding alternative processes for those who are symptomatic or have specific contraindications
> prior to mass vaccination clinics commencing, messaging to inform patients about what they need to bring to the clinic with them, and where they can access educational materials
> the role of designated mass vaccination clinics and what to expect on arrival
> mass vaccination clinic location
> information to providers about vaccine distribution
Settings for pandemic vaccination delivery

Pandemic vaccination will occur across a wide variety of settings, lessening the pressure on community mass vaccination centres. Organisations that are self sufficient in delivering seasonal influenza or routine immunisation programs can deliver their own pandemic influenza vaccination.

Each clinic will operate differently according to its geographic location and population base with an expectation that local government will be heavily involved in communication and coordination.

Schools

Free vaccination against human papilloma virus (HPV), diphtheria, tetanus, pertussis (dTpa) and varicella (chickenpox) is given annually to year 8 students through the School Immunisation Program. The program is delivered in schools usually through local councils. Consent is obtained from parents prior to administration.

It may be difficult, but possible, to adapt the School Immunisation Program to administer the pandemic influenza vaccine. In the School Immunisation Program parental (or caregiver) consent is obtained prior to the vaccination date, with consent forms and information usually sent weeks or months prior. Possibilities include:

- use an opt out consent system rather than an opt in system
- run the immunisation session late or early in the day so parents are present to provide consent
- use electronic systems such as email or SMS to obtain consent.

Residential Care Facilities

In residential aged care facilities, seasonal influenza vaccination is provided through nurse-led vaccination, or alternatively, vaccination of residents may be provided by the resident’s general practitioner (GP). Extension of seasonal influenza nurse-led vaccination programs in residential aged care facilities to pandemic influenza vaccination should occur. In the event of a pandemic, GPs may be unable to immunise residents at the residential aged care facilities due to workload requirements at the GP practice. Use of opt out vaccination programs may be appropriate.

In residential care facilities for persons with a disability such as those managed by Disability SA, pandemic influenza vaccination should be provided by applying the same model of program delivery used for providing seasonal influenza vaccination.

Prison Health Services

Similarly, pandemic influenza vaccination delivery in Prison Health Services should be provided by applying the same model of program delivery used for providing seasonal influenza vaccination.

General practice

General practices are experienced in the promotion of annual seasonal influenza vaccination, particularly to medically at risk patients and people ≥65 years of age. General practices are in an ideal position to deliver influenza vaccination in a pandemic, though given potential staff shortages and management of patient load, vaccination by GPs may be opportunistic rather than vaccination en masse. Some general practices may run pandemic vaccination clinics using nurse immunisers (either independently or under a medical order).

In the context of their pandemic business continuity planning, practices should assess their capacity to provide varying levels of immunisation services, and identify dedicated staff within the practice to
coordinate and manage immunisation services e.g. vaccine storage, documentation and patient triage, if necessary.

**Pharmacy**

For a fee, approved pharmacies are now providing seasonal influenza vaccination to persons \( \geq 16 \) years of age. Vaccinations may be provided by a registered nurse or a pharmacist who meets the criteria as per the Controlled Substances (Poisons) Regulations 2011 under the *Controlled Substances Act 1984*.

In an influenza pandemic, it is anticipated pharmacies will continue to provide pandemic influenza vaccination, although this may be a user-pays system.

**Private worksite vaccination programs**

Due to the high attack rate of seasonal influenza in the general population, influenza vaccination in the workplace can result in benefits such as increased productivity and reduced absenteeism among workers. Encouraging the growth of seasonal influenza vaccination in the workplace will build infrastructure in the interpandemic period which will allow industry to efficiently draw on these systems during the pandemic period, thereby reducing the demand placed on community vaccination programs. Pandemic vaccination worksite programs are likely to provide the same benefits of increased productivity and reduced absenteeism among workers.

**Government worksite vaccination programs**

SA Health, SAPOL and other government departments provide free annual seasonal influenza vaccination to staff, irrespective of whether the staff member is eligible for the Annual Funded Influenza Program. SA Health programs include volunteers and administration staff, not just those with direct patient contact. Development of robust infrastructure in the interpandemic period should assist with roll out of influenza vaccination in a pandemic.

HCWs may become a source of infection to individuals in their care. Annual seasonal influenza vaccination of HCWs has been shown to protect high risk patients, reduce influenza rates in staff and patients, and reduce sick leave among health staff during the influenza season.

**Local Council Community Vaccination Programs**

Under the *South Australian Public Health Act 2011*, a council must provide, or support the provision of, immunisation programs for the protection of public health within its area.

Council run community immunisation clinics are frequently located within council buildings, usually with a registered nurse immunisation provider.

Local government is ideally placed as the regional coordinator of immunisation service provision for the community. In the interpandemic period local government will have gathered information on the various service providers and their capacity for service provision in the event of a pandemic. This preparation will provide them with an understanding of the ability of these services to respond to community needs for mass vaccination.

Councils are ideally placed and experienced for:

- Coordination of immunisation services to ensure all groups have access to vaccination.
- The provision of mass vaccination clinics.
- Coordination of activities with bordering municipalities.
Additional Health Care Settings
In a pandemic, it is anticipated that influenza vaccination could be offered in the following additional health settings:

- Aboriginal Health Services – staff and Aboriginal and Torres Strait Islanders.
- Private hospitals – staff and inpatients, patients attending private clinics.
- Public hospitals – inpatients, public outpatient clinics, accident and emergency.
- Child and Youth Health – delivery of vaccination to their client base.
- Community Health Services – delivery of vaccination to their client base, particularly supporting providers in the rural and remote settings.

Mass vaccination clinics
In addition to ramping up of existing vaccination infrastructure and programs, mass vaccination clinics may be required in a pandemic. Mass vaccination clinics should meet the following standards.

Standard one: effective and timely communication
Australian Government and state agencies will support providers in the community education process through development of resources such as:

- influenza fact sheets
- fact sheets on vaccination eligibility criteria
- facts sheets on risks versus benefits
- facts sheets on contraindications/allergies
- vaccination consent form
- personal record card
- vaccine safety information
- adverse event report form.

Please refer to communication section.

Standard two: appropriate and timely training of staff
While some education and preparation will take place in the pre-pandemic period, further information specific to the factors relevant to the pandemic response will need to be communicated. Prior to the availability and distribution of vaccine, organisations should update staff.

Vaccine providers
Pandemic specific education topics for vaccine providers include:

- management of multi-dose vials (if used)
- correct use of equipment
- pandemic influenza vaccine specific adverse events, and adverse event reporting
- pandemic influenza vaccine contraindications and precautions
- vaccine eligibility criteria (if applicable)
- referral of patients who decline or who have contraindications to the vaccine, or have influenza symptoms and may require referral for anti-viral therapy or assessment.

Support staff
Education topics for support staff include:
first aid and adverse events
conflict management
stock control
resource allocation
rosters and clinic staffing
coordinating clinic flow.

Volunteers
The role of volunteers in assisting in the delivery of mass vaccination should be considered in the pre-pandemic period and protocols relating to their specific roles and responsibilities should be developed. Volunteer allocation should consider matching skill sets and availability to the needs of individual regions. Potential roles for volunteers include maintaining clinic flow, directing patients, assisting with crowd control, acting as meet and greet personnel, re-stocking stations, providing catering, and interpreting.

Standard three: appropriate site selection and set up
Buildings considered for mass vaccination should be large enough to process the required numbers. Many facilities used as polling booths satisfy most criteria. The types of sites that could be suitable locations for a mass vaccination clinic include halls, schools, churches, hotels, mobile roadside clinics, showground sheds, senior citizens facilities, and sporting club rooms. Hospitals and other healthcare facilities should be avoided as they will continue to be needed for other purposes, as should sites that would be identified for use as a ‘flu clinic’.

Issues to consider when selecting an appropriate site include:
> sufficiently large floor space including space for vaccine providers and recovery area but no areas for patients to congregate in large numbers
> accessibility by public transport and availability of disabled access
> whether the site is easy to find, preferably with local identification
> availability of toilet facilities
> sufficient parking and traffic control
> availability of landline phone and mobile coverage.

Sites need to be set up to:
> have adequate security including for staff if working out of hours
> have one directional flow through
> have adequate privacy for clients
> have clear signage to identify each venue as a mass vaccination clinic, provide direction to the venue, and provide internal directions indicating the operational flow
> have available chairs, tables, screens, waiting areas, and a recovery area with mats or bed
> comply with the ‘Strive for Five’ guidelines
> have sufficient clinical equipment such as sharps containers, alcohol swabs, dressings, administration equipment (needles, syringes if needed), anaphylaxis kits and resuscitation equipment
> have sufficient supply of consumables e.g. bin bags, hard surface disinfectant, hand cleanser, gloves.
Standard four: assessment of expected demand and allocation of appropriate resources

Staffing needs will vary depending on clinic size and setting, and in a small clinic situation some roles can be consolidated or eliminated (see table 1 below). When calculating staffing needs, consider rostered time off, and that pandemic influenza vaccine may be 2 doses, at least one month apart.

- The vaccination team will need a briefing prior to the vaccination session regarding the plan for the session e.g. layout of the venue, resuscitation area, number of people expected to attend, refreshments for staff and how breaks will be organised.
- Organisations should develop a policy on management of a volunteer workforce.
- All personnel should be easily identifiable so the members of the public can seek assistance e.g. colour coded vests, or labelling.
- Non-medically qualified personnel may be able to assist in the screening process by using a simple algorithm (decision tree).
- The skills of the most experienced clinical staff should be focused mainly on dealing with complications, contraindications and providing advice and reassurance. It is envisaged that both registered and enrolled nurses will be required.

Table 1: Suggested staffing numbers for clinics of various sizes

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Large vaccination clinic</th>
<th>Small vaccination clinic</th>
<th>Outreach clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated number of people vaccinated</td>
<td>4000 people in an 8 hour period</td>
<td>1000 people per day over an 8 hour period</td>
<td>200 - 250 people per day over an 8 hour period</td>
</tr>
<tr>
<td>Senior staff</td>
<td>Site manager = 1</td>
<td>Site / facility manager = 1</td>
<td>Clinical team leader and assessor = 1</td>
</tr>
<tr>
<td>Clinical staff</td>
<td>Clinical team leader = 1</td>
<td>Clinical team leader = 1</td>
<td></td>
</tr>
<tr>
<td>Assessment area</td>
<td>9</td>
<td>Assessment area = 4</td>
<td></td>
</tr>
<tr>
<td>Vaccination area</td>
<td>12</td>
<td>Vaccination area = 5</td>
<td></td>
</tr>
<tr>
<td>Post-vaccination area</td>
<td>2-3</td>
<td>Post-vaccination area and first aid area = 2</td>
<td></td>
</tr>
<tr>
<td>First aid area</td>
<td>2</td>
<td>Total = 11</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical staff</td>
<td>Assessment area = 4</td>
<td>Assessment area = 4</td>
<td></td>
</tr>
<tr>
<td>Vaccination area</td>
<td>5</td>
<td>Vaccination area = 5</td>
<td></td>
</tr>
<tr>
<td>Post-vaccination area and first aid area</td>
<td>2</td>
<td>Vaccination area and assessor = 1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>Total = 11</td>
<td></td>
</tr>
<tr>
<td>Clinical staff</td>
<td>Floater – back up, post vaccination area and first aid area = 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>Total = 2</td>
<td></td>
</tr>
<tr>
<td>Administration staff</td>
<td>Registration area = 8</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Assessment area</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td>Registration area = 2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Waiting area</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-vaccination area</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floaters</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security staff</td>
<td>3</td>
<td>1-2</td>
<td>-</td>
</tr>
<tr>
<td>Cleaner</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Standard five: an efficient and streamlined clinic flow

Smooth clinic flow is one of the criteria considered when selecting a suitable site. The following describes the operation of a large mass vaccination clinic. Regardless of the clinic size and location the functions and flow principles remain the same. The aim is to have unilateral patient flow. Key considerations for smooth operational flow:

> clinics should have clearly marked entrance and exit points
> security staff can be located at entry and exit points to maintain flow of patients
> coloured tape on the floor or barriers can be used to keep clients on track
> place highly visible signage at each table or divider
> visual-diagrammatical signage assists patients with literacy challenges
> queue management systems such as use of tickets, rigorous marshalling, and physical barriers.

Bottlenecks are at times unavoidable, however they can be limited by:

> Removing patients who require further consultation from the flow, such as due to potential contraindications or precautions.
> Providing the public with opportunities to access information prior to the clinic (such as post, mass media and internet). This will provide them with a clear understanding of what to expect on arrival, what to bring to the clinic, and general information required for informed consent.
> Referring patients experiencing symptoms to the nearest medical assessment centre.

Table 2: Suggested stations in a mass vaccination clinic

<table>
<thead>
<tr>
<th>Station</th>
<th>Staffed by</th>
<th>Functions / considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance</td>
<td>Security &amp; greeter</td>
<td>Large front entrance to reduce bottleneck effect</td>
</tr>
</tbody>
</table>
| Reception        | Administration officers          | Large reception area to reduce bottleneck effect  
|                  |                                  | Queue management process (e.g. ticket system)                                             |
|                  |                                  | Clients given written information on the vaccine and side effects, a one page medical questionnaire, pre-vaccination checklist and consent form |
|                  |                                  | Clients should be given the opportunity to ask questions at the pre-vaccination assessment station prior to completing the consent form |
|                  |                                  | Clients should be given the opportunity to ask questions at the pre-vaccination assessment station prior to completing the consent form |
| Waiting area     | Volunteers & health staff        | Located next to reception area                                                           |
|                  |                                  | Clients to read information sheets & complete personal details                             |
|                  |                                  | Covered waiting area with adequate seating                                               |
|                  |                                  | Toilets and hand washing facilities                                                       |
|                  |                                  | Drinking water available                                                                 |
|                  |                                  | Management of clients who become unwell whilst waiting                                   |
|                  |                                  | Public address system, preferably visual and audio, used to indicate next client to present to pre-vaccination area |
| Pre-vaccination  | Administration officers, registered | Answer any client questions prior to vaccination                                           |
|                  |                                  | Clients’ eligibility for vaccination including contraindications and pre- |


| assessment nurses | vaccination checklist assessed. Eligible clients are directed to the pre vaccination waiting area
Clients not eligible or contraindicated for vaccination are counselled and sent home. Clients who are acutely febrile (≥38.5°C) or show signs of systemic illness will need to be clinically assessed and referred.
Clinical queries addressed at this point
Collation of completed forms and assessment |
|------------------|--------------------------------------------------------------------------------------------------|
| **Appropriate storage of vaccines** |Immunisation program nurse / registered nurse
Vaccines must be stored according to the current National Vaccine Storage Guidelines
Appropriate equipment should be available to store and maintain the temperature of vaccines between +2°C and +8 °C (i.e. a purpose-built vaccine refrigerator or purpose-built mobile vaccine refrigerators)
Vaccines management throughout the clinic must be closely monitored (i.e. the number of vaccines left out during a clinic should be minimal and topped up when required)
At the end of the vaccination session (or up to a maximum interval of 4 hours after the vaccines have been drawn up), any remaining pre-drawn syringes must be discarded
Multi-dose vials must not be used beyond 24 hours after first opening (as per manufacturer’s instructions, expected to be 24 hours) |
| **Vaccination administration** | Vaccine providers
Vaccination stations should be clearly numbered
Most work stations need to be able to accommodate family groups
If possible, a degree of privacy should be afforded to the client e.g. a screen
Clean treatment area for drawing up vaccines
Hand washing facilities
Process for documenting vaccination records for client
Pathway to post vaccination area where client must wait for 15 minutes
This area should not be used to manage people who present with influenza like symptoms |
| **Post vaccination delivery** | Volunteer organisation / HCWs
Large area that enables easy observation of clients post vaccination
Adequate seating and access to drinking water for people post vaccination
Process for transferring clients who become unwell from post vaccination area to first aid area |
| **First aid** | Registered nurse
Located near post vaccination observation station
Process for managing Adverse Events Following Immunisation (AEFI)
Mats or mattress with screen for privacy for unwell clients
Emergency medications and equipment
Telephone
Medically compromised patients receive first aid and referred for further care as appropriate
Complete AEFI form |
Standard six: accurate collection of data and provision of reports

- Immunisation providers need to be able to produce accurate data relating to the number of individuals vaccinated.
- The state will collate this data to assess coverage in the target groups and general community. This information will be communicated to key stakeholders and the public.

Standard seven: evaluation and review

At the end of each clinic the team leaders should meet to discuss the operational issues, with changes made in response, as appropriate, for example:

- What worked well?
- What failed to work?
- Were objectives met?
- Was resource allocation appropriate?

Resources

- The Influenza Specialist Group (ISG) consists of medical and scientific specialists and includes representatives of professional and patient groups. It cooperates with state and federal governments in educational activities regarding influenza in conjunction with many other organisations [http://www.isg.org.au/](http://www.isg.org.au/).
- The Communicable Disease Control Branch, SA Health, (which includes the Immunisation Section) provides education, resources and phone advice to organisations providing immunisation services.
  
  Telephone: 1300 232 272
  
  
  
  - Manufacturers of influenza vaccines provide varying levels of support and resources to immunisation providers, including technical advice and promotional materials.

References


The Pandemic vaccines: evidence summary.

https://cdn.metricmarketing.ca/www.nccid.ca/files/Evidence_Reviews/NCCID_H1N1_MASS_Vaccination_HR.pdf

Pandemic Influenza Preparedness Team. Department of Health. 2011 Use of Vaccines against Pandemic Influenza: Scientific Evidence Base Review.